



## **Estimated Four-Year Graduation Rates: How do you arrive at that number?**

The calculation used to determine the graduation rate takes into account student attrition in a high school over a four-year period. This is done by multiplying the class retention rates for all four grade-levels in the secondary school (9-12).

Here's an example of how it works:

Suppose you started with 100 students in their freshman year. If three did not continue their education, then the retention rate for the freshman class would have been 97 out of 100, or 97 percent.

There were then 97 students who progressed to the sophomore class. If three did not continue their education, then the retention rate for the sophomore class would have been 94 out of 97, or 96.9 percent.

There were then 94 students who progressed to the junior class. If three did not continue their education, then the retention rate for the junior class would have been 91 out of 94, or 96.8 percent.

We then had 91 students who progressed to the senior class. If three did not graduate, then the retention rate for the senior class would have been 88 out of 91, or 96.7 percent.

By multiplying all four class retention rates (.970 X .969 X .968 X .967), we get a graduation rate of .8798, or rounded, 88 percent.

If we look at the actual number of students who did not continue their education over the four years, we would see that there were three students in each class who did not continue their education, or a total of 12 students. We started with 100 students. Twelve students did not continue their education, so the graduation rate would be  $(100-12)/100 = .88$ , or 88 percent. Although there is some rounding error using the product of the four retention rates, the error is minimal.

Example Calculation of an Estimated Four-Year Graduation Rate				
	Freshman	Sophomore	Junior	Senior
Beginning Enrollment	100	97	94	91
Left school (did not continue)	3	3	3	3
Stayed in school or Graduated	97	94	91	88
Class Retention Rate	$97/100 = .970$	$94/97 = .969$	$91/94 = .968$	$88/91 = .967$
Estimated Four-Year Graduation Rate	$.970 \times .969 \times .968 \times .967 = .8798$ or round to 88 percent			